

REMARKS

Claims 1-16 were examined. Claims 6-7 and 13-14 are cancelled. Claims 1-5, 9-12, and 16 are amended. Claims 1-5, 7-8, 10-12, and 14-16 are rejected under 35 U.S.C. § 102(e) based upon United States Patent No. 6,442,283 issued to Tewfik (Tewfik). Claims 6, 9, and 13 are rejected based upon Tewfik further in view of United States Patent No. 6,480,825 B1 issued to Sharma (Sharma).

DRAWINGS

The United States Patent & Trademark Office (USPTO) objected to the drawings for being informal. Formal drawings for Figures 2A-2C, 4A-4D, 5, 6A-6B and 7A-7C are enclosed. Approval of the formal drawings is respectfully requested.

REJECTION UNDER 35 U.S.C. §102

Claims 1-5, 7-8, 10-12, and 14-16 are rejected under 35 U.S.C. § 102(e) as being anticipated by Tewfik. Independent claims 1 and 11 have been amended to more clearly distinguish the claimed invention over data embedding processes such as those disclosed by Tewfik. In particular, the audio signals are transformed to either a linear prediction domain or a cepstrum domain. Additionally, the hidden data is embedded either a linear prediction domain or a cepstrum domain of the audio signal.

The USPTO admits that Tewfik fails to disclose the linear prediction domain. Office Action dated February 5, 2004, pp. 5-7. However, according to the USPTO, the cepstrum domain is disclosed in col. 9, lines 11-31 of Tewfik. Nowhere in this passage does it show the three operations to transform a signal to a cepstrum domain. To

transform a signal to the cepstrum domain, a signal undergoes a fast Fourier transform (FFT), followed by a logarithmic operation, then an inverse FFT. Additionally, none of the figures of Tewfik disclose the spectrum pattern that is associated with the cepstrum domain. Accordingly, withdrawal of the rejection of claims 1-5, 8, 10-12, and 15-16 under 35 U.S.C. §102(e) is respectfully requested.

REJECTION UNDER 35 U.S.C. §103

Claims 1-4 and 6-9 are rejected under 35 U.S.C. §103(a) as obvious based upon Tewfik in view of Sharma. The USPTO used broad conclusory statements to explain why the clauses from claims 6, and 13 are obvious based upon Tewfik in view of Sharma, the USPTO stated that:

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Tewfik's invention such that it transforms the received audio signal to a linear prediction residue domain and embeds the hidden data in the linear prediction residue domain in order to train pattern classifiers to control distortion and ensure perceptibility.

Office Action dated February 5, 2004, pp. 5-6.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Tewfik's invention such that the non-base domain is selected from the group consisting of linear prediction residue and cepstrum domain, such that the transformed attacked inverse transformation signal is in the non-base domain to generate a second transformed audio signal that is in the non-base domain and such that it extracts from the embedded hidden data from the second transformed audio signal that is in the non-base domain, to obtain an audio sample for extraction of the channel characteristics or "estimate the channel" for distortion purposes.

Office Action dated February 5, 2004, pp. 6-7.

A similarly broad conclusory statement was rejected by the Board of Patent Appeals and Interferences ("the Board") in the case entitled Ex Parte Huang, No. 1997-3338, (Bd. Pat. App & Int. 1997 unpub.) In that case, the examiner stated:

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the above references' teachings as taught by Sun et al., Lee et al., and Sandhu et al. because such use of planarized plugs by CMP [chemical mechanical polishing] or etchback and the claimed deposition processes and materials are conventional and obvious as evidenced by Sun et al., Lee et al., and Sandhu et al. to enable the formation of a planarized plug for contact.

Id. In reversing the examiner's rejection of the pertinent claims, the Board, stated:

Most if not all inventions arise from a combination of old elements. Thus, every element of a claimed invention may often be found in the prior art. However, identification in the prior art of each individual part claimed is insufficient to defeat patentability of the whole claimed invention. Rather, to establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the applicant.

This ruling conforms to the Federal Circuit's edict that broad conclusory statements standing alone are not "evidence." In re Dembiczak, 175 F.3d 994, 1000 (Fed. Cir. 1999). Accordingly, merely reciting that an element of a claimed invention is taught by a reference does not establish a motivation to combine references. Since there is no discernible motivation for combining the Sharma with Tewfik, the rejection of the limitations in claims 6, 9, and 13 under 35 U.S.C. §103(a) cannot stand as a matter of law.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests

that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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